

## ABSTRACT OF THE DISCLOSURE

A substrate treatment process is disclosed to remove organic matter existing on a substrate such as a wafer, glass substrate or ceramic. The process comprises treating the substrate with ozone water and then with hydrogen water, or treating the substrate with ozone-hydrogen water or treating the substrate with ozone water and hydrogen water at the same time. A substrate treatment apparatus is also disclosed for a substrate. The apparatus comprises a treatment vessel, a substrate holder for rotating the substrate in a horizontal plane in the treatment vessel, a nozzle unit arranged in an upper part of the treatment vessel such that a liquid is downwardly fed, a feed line for feeding the liquid to the nozzle unit, and a chamber enclosing therein the apparatus in its entirety. The nozzle unit is constructed in a form of a bar such that as viewed in plan, the liquid ejected from the nozzle unit reaches, with an area range having a length not smaller than a diameter of the substrate and a width smaller than the diameter of the substrate, the substrate.